# Trading

## To Trade or Not to Trade? Informed Trading With Short-Term Signals for Long-Term Investors

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One of the great frustrations in the asset management profession is to watch trading costs render useless a signal that predicts near-term returns beautifully. What is one to do with this predictive information? One option is to invest resources in hopes of refining the signal sufficiently to more than cover its trading costs — and then pray that the refined signal is not overfitted. Alternatively, the signal may be combined with other, unrelated short-term information to obtain sufficient predictability.

Unfortunately, because both options are easier said than done, short-term signals are usually ignored. That is wasteful, but the cost-to-benefit ratio of trading on such information may not appear to make sense at first glance. After all, paying $10 for $3 of expected revenues is not good business — if you try to trade on this information alone.

In this article, we offer an alternative algorithm that exploits rapidly decaying information without requiring the payment of additional transaction costs. The catch is that our algorithm works only in conjunction with another portfolio whose signals have slower information decay. By allowing a short-term view to inform trading decisions on a long-term portfolio, investors can lower their portfolios' tracking error to its desired long-term view and obtain an exposure to an attractive short-term signal. Instead of trading the view, investors can simply make sure they never trade against the view.

Our algorithm provides an additional benefit for investors primarily focused on long-term portfolios: They can effectively get paid to take the short-term bet through the reduced transaction costs of trading the long-term portfolio.

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